## **EAST Search History**

## **EAST Search History (Prior Art)**

| Ref#       | Hits | Search Query  | DBs                          | Default<br>Operator | Plurals | Time Stamp          |
|------------|------|---|------------------------------|---------------------|---------|---------------------|
| S1         | 29   | ((SURENDRA) near2<br>(KHAMBETE)).INV.   | US-PGPUB;<br>USPAT;<br>USOCR | OR                  | OFF     | 2008/08/18<br>06:56 |
| <b>S</b> 2 | 54   | ("6024190" "5483028" "5536556" "5068001" "6345688" "6648100" "5780156" re33200 "6631785" "6318796" "5935509" "5656109" "5536341" "5229052" "5215696" "4568581" "6629340" "6659223" "6578447" "4890995" "4421468" "4898697" "5843365" "6127021" "5538571" "5147653" "5217672" "5328494" "5336455" "5413750" "5733631" "5681519" "5492662" "5482665" "6033607" "6165921" "6033501" "6305920" "4663103" "4808545" "4824709" "4849267" "4877669" "4988551" "6162748" "6388350" "6406574" "6595321" "6548141" "6534145" "5876826" "5749993" "4579764" "4529639" "3673034").pn. | USPAT                        | OR                  | OFF     | 2008/08/18          |
| S3         | 3    | (US "20060208379" A1<br>US "20060246799" A1<br>US "5733631" A US<br>"5749993" A US<br>"5935509" A US<br>"6024190" A US<br>"6033501" A US<br>"6033607" A).pn. and<br>perforat\$  | US-PGPUB;<br>USPAT           | OR                  | OFF     | 2008/11/14<br>16:37 |
| S4         | 1    | "20060112562".pn.   | US-PGPUB;<br>USPAT           | OR                  | OFF     | 2008/11/14<br>16:51 |

| S5  | 4   | 29/898.07,898.ccls.<br>and hub and broach\$   | USPAT                        | OR | ON  | 2008/11/14<br>16:54 |
|-----|-----|---|------------------------------|----|-----|---------------------|
| S6  | 0   | 29/898.07,898.ccls.<br>and hub and (((semi-<br>dry) or dry) with<br>broach\$)   | USPAT                        | OR | ON  | 2008/11/14<br>17:09 |
| S7  | 0   | hub and (((semi-dry)<br>or dry) with broach\$)  | USPAT                        | OR | ON  | 2008/11/14<br>17:09 |
| S8  | 0   | 29/898.07,898.ccls.<br>and hub and (dry with<br>broach\$)   | USPAT                        | OR | ON  | 2008/11/14<br>17:09 |
| S9  | 0   | hub and (dry with broach\$)   | USPAT                        | OR | ON  | 2008/11/14<br>17:10 |
| S10 | 12  | (dry with broach\$)   | USPAT                        | OR | ON  | 2008/11/14<br>17:15 |
| S11 | 4   | (dry adj broach\$)  | USPAT                        | OR | ON  | 2008/11/14<br>17:16 |
| S12 | 6   | ((MASAHIRO) near2<br>(YASUMURA)).INV.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/14<br>17:22 |
| S13 | 13  | ((NOBUYUKI) near2<br>(HAGIWARA)).INV.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/14<br>17:24 |
| S14 | 412 | hub and broach\$  | USPAT                        | OR | ON  | 2008/11/14<br>17:26 |
| S15 | 4   | ("20040026648"  <br>"5025826"   "5810504"<br>  "6276662").PN. OR<br>("7331358").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/14<br>18:09 |
| S16 | 349 | hub and broach\$ and<br>@ay< "2002"   | USPAT                        | OR | ON  | 2008/11/14<br>18:14 |
| S17 | 14  | ("1310934"  <br>"1324289"   "1910118"<br>  "2158720"  <br>"2315476"  <br>"2317514").PN. OR<br>("4411569").URPN.                   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/14<br>18:14 |
| S18 | 5   | (("1310934"  <br>"1324289"   "1910118"<br>  "2158720"  <br>"2315476"  <br>"2317514").PN. OR<br>("4411569").URPN.)<br>and broach\$ | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/14<br>18:15 |

| S19 | 17  | ("0131293"  <br>"0430133"   "0518023"<br>  "0722222"  <br>"0870971"   "0958081"<br>  "2534759"  <br>"4284377"  <br>"5150996").PN. OR<br>("6132151").URPN.             | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/14<br>18:25 |
|-----|-----|---|------------------------------|----|-----|---------------------|
| S20 | 7   | broach\$ same (cap or cover) same chip  | USPAT                        | OR | ON  | 2008/11/15<br>13:30 |
| S21 | 1   | ("1507771").PN.   | USPAT                        | OR | ON  | 2008/11/15<br>13:31 |
| S22 | 165 | broach\$ same clean\$   | USPAT                        | OR | ON  | 2008/11/15<br>13:32 |
| S23 | 18  | ("1945535"  <br>"2849107"   "3249538"<br>  "3392117"  <br>"4257902"   "4409113"<br>  "4498361"  <br>"5407590"   "5503506"<br>  "5589095").PN. OR<br>("5792728").URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/15<br>13:39 |
| S24 | 196 | broach\$ same chip  | USPAT                        | OR | ON  | 2008/11/15<br>13:49 |
| S25 | 17  | ("1930745"  <br>"3715901"   "3795957"<br>  "4012829"  <br>"4111586"   "4133089"<br>  "4393675"  <br>"4502308").PN. OR<br>("4573841").URPN.                            | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/15<br>14:09 |
| S26 | 3   | broach\$ same seal<br>same chip   | USPAT                        | OR | ON  | 2008/11/15<br>14:15 |
| S27 | 101 | broach\$ and (hub<br>same (seal or cap or<br>cover))  | USPAT                        | OR | ON  | 2008/11/15<br>14:18 |
| S28 | 10  | broach\$ same clean\$<br>same chip  | USPAT                        | OR | ON  | 2008/11/15<br>14:36 |
| S29 | 0   | dry same broach\$<br>same clean\$ same chip   | USPAT                        | OR | ON  | 2008/11/15<br>14:38 |
| S30 | 0   | semi-dry\$ same broach<br>\$ same clean\$ same<br>chip  | USPAT                        | OR | ON  | 2008/11/15<br>14:38 |
| S31 | 0   | dry\$ same broach\$<br>same clean\$ same chip   | USPAT                        | OR | ON  | 2008/11/15<br>14:38 |

| S32 | 34  | dry\$ same broach\$  | USPAT                        | OR | ON  | 2008/11/15<br>14:38 |
|-----|-----|--|------------------------------|----|-----|---------------------|
| S33 | 47  | broach\$ with remov\$<br>with chip   | USPAT                        | OR | ON  | 2008/11/15<br>14:44 |
| S34 | 1   | "20060112562".pn.<br>and ring  | US-PGPUB                     | OR | ON  | 2008/11/15<br>16:53 |
| S35 | 1   | "20060112562".pn.<br>and revers\$  | US-PGPUB                     | OR | ON  | 2008/11/15<br>16:54 |
| S36 | 5   | hub and (revers\$ with broach\$)   | USPAT                        | OR | ON  | 2008/11/15<br>16:55 |
| S37 | 26  | hub and (ring with broach\$)   | USPAT                        | OR | ON  | 2008/11/15<br>17:04 |
| S38 | 210 | (ring with broach\$) not<br>S37  | USPAT                        | OR | ON  | 2008/11/15<br>17:10 |
| S39 | 15  | (ring same hub same<br>broach\$) not S37   | USPAT                        | OR | ON  | 2008/11/15<br>17:26 |
| S40 | 107 | ((ring same hub) and<br>broach\$) not (S37 or<br>S38)  | USPAT                        | OR | ON  | 2008/11/15<br>17:33 |
| S41 | 306 | ((retain\$ with ring)<br>and broach\$) not (S37<br>or S38)   | USPAT                        | OR | ON  | 2008/11/15<br>17:44 |
| S42 | 44  | ((retain\$ with ring)<br>same broach\$) not<br>(S37 or S38)  | USPAT                        | OR | ON  | 2008/11/15<br>17:45 |
| S43 | 14  | ("5226738"  <br>"5490732"   "5549514"<br>  "5556210"  <br>"5797686"   "6146022"<br>  "6363799"  <br>"6398419").PN. OR<br>("6672769").URPN.   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/15<br>17:55 |
| S44 | 13  | ("20030002761"   "20030074793"   "5226738"   "5490732"   "5975765"   "6113279"   "6135571"   "6398419"   "6524011"   "6619852"   "6672769"   "6772615"   "6782622").PN. OR ("6880247").URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2008/11/15<br>17:59 |
| S45 | 237 | press-fit\$ with bearing with hub  | USPAT                        | OR | ON  | 2008/11/16<br>11:43 |

| S46 | 1  | ("5197837").PN.                           | USPAT | OR | ON  | 2008/11/16<br>12:10 |
|-----|----|---|-------|----|-----|---------------------|
| S47 | 1  | ("5197837").PN. and (oil or lubricant)    | USPAT | OR | ON  | 2008/11/16<br>12:13 |
| S48 | 1  | "5011302".pn.                             | USPAT | OR | OFF | 2008/11/16<br>12:40 |
| S49 | 2  | broach\$ with (press-fit<br>\$) with ring | USPAT | OR | ON  | 2009/07/19<br>10:41 |
| S50 | 20 | broach\$ with (press-fit<br>\$)           | USPAT | OR | ON  | 2009/07/19<br>10:44 |

## $7/\ 20/\ 09\ 11:03:01\ AM$ C:\ Documents and Settings\ RChang\ My Documents\ EAST\ workspaces\ 10539264. wsp